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10/611,259

06/30/2003

James Harold Gray

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SALCE, JASON P

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/611,259	<b>Applicant(s)</b> GRAY ET AL.	
	<b>Examiner</b> Jason P. Salce	<b>Art Unit</b> 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-20,40-50,69-78 and 87-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20,40-50,69-78 and 87-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 5/7/2009 have been fully considered but they are not persuasive. The amended claims still read on the prior art of record.

Applicant has amended claim 11 to recite “**determining whether to supply alternate content to a terminal device associated with a user**”. The Examiner notes that Zigmond teaches a terminal device associated with a user in Figure 2, wherein the user interacts with a set-top box 201.

Applicant also further amended claim 11 to recite “**determining when a specified portion of the alternate content is sent to the terminal device**”. The Examiner notes that Zigmond teaches these limitation at Column 7, Lines 18-20 for the receiver unit 201 receiving the alternate content (**information resource 301**) and determining to store the alternate content in the receiver unit's storage. The Examiner notes that the act of storage by the receiver unit is a determination of when the alternate has been sent.

Applicant has further amended claim 11 to recite “**inserting a hot key signal into a content signal transmitted to the terminal device from the interactive television service provider via a network with which the terminal device and the interactive television service provider are connected after the specified portion of the alternate content has been sent to the terminal device**”. The Examiner notes that Zigmond teaches these limitations at Column 7, Lines 21-24 for transmitting the

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URI/resource identifier after the information resource has been stored by the receiver unit 201.

The Examiner further notes in regards to claim 11, that the determination that the alternate content has been sent in conjunction with transmitting the hot key signal after the alternate content has been sent is broad and places no antecedence between the system of the instant application transmitting the hot key signal in response to the determination of the alternate content being sent. In other words, the claim fails to not only state that the transmission of the hot key signal is not specifically transmitted in response to the determination that alternate content has been sent (**by only stating that the hot key signal is transmitted after the alternate content, not in response to**), but further the determination of alternate content being sent does not specify if the receiving or transmitting device makes such a determination.

Referring to claim 40, Applicant has amended the claim to recite “***determine whether to supply alternate content to a terminal device associated with a user***”.

The Examiner notes that Zigmond teaches a terminal device associated with a user in Figure 2, wherein the user interacts with a set-top box 201.

Applicant has further amended the claim to recite, “***responsive to determining to supply alternate content to the terminal device***”. See again Zigmond teaching a terminal device associated with a user in Figure 2, wherein the user interacts with a set-top box 201.

Applicant has further amended the claim to recite, “***wherein the hot key signal causes instructions to present for display an on-screen image overlaid on a television program that is displayed based on the content signals when the hot key signal is determined to be relevant to the user***”. The Examiner notes that Zigmond teaches these limitations at Column 7, Lines 21-24 where the transmission device determines the appropriate time to transmit the hot key signal (**information identifier**) to the user, therefore determining that the hot key signal is relevant to the user. The Examiner further notes that Shoff also teaches this limitation in Figures 6-7 for determining the proper resource to display to the user based on the URL/resource identifier data stored or transmitted to the user (**see Figures 3-4 and Column 7, Line 51 through Column 8, Line 3**). Therefore determining when a hot key signal is relevant to a user based on the television program the viewer is currently watching.

Referring to claim 69, Applicant has amended the claim to state that “***send the alternate content to a cache of each terminal device of the at least one terminal device***”. The Examiner notes that Zigmond teaches a television broadcast network which transmits television and information signal to multiple users (**see Column 5, lines 10-22**). Further note that Shoff explicitly teaches transmitting television and information signals to multiple users (**see Column 4, Lines 14-21**).

Applicant has further amended the claim to state, “***wherein the hot key signal causes instructions to present for display an on-screen image overlaid on a television program that is displayed based on the content signal to a particular***”

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**user of the users, wherein the on-screen image is displayed when the hot key signal is determined to be relevant to the particular user and a particular cache of a particular terminal device of the at least one terminal device that is associated with the particular user received at least a specified portion of the alternate content**".

The Examiner notes that Zigmond teaches these limitations at Column 7, Lines 21-24 where the transmission device determines the appropriate time to transmit the hot key signal (**information identifier**) to the user, therefore determining that the hot key signal is relevant to the user. The Examiner further notes that Shoff also teaches this limitation in Figures 6-7 for determining the proper resource to display to the user based on the URL/resource identifier data stored or transmitted to the user (**see Figures 3-4 and Column 7, Line 51 through Column 8, Line 3**). Therefore determining when a hot key signal is relevant to a user based on the television program the viewer is currently watching.

Further note Column 7, Lines 18-35 for displaying the on-screen image after the information resource has been received and stored, therefore teaching displaying the on-screen image when a particular cache of a particular terminal device of the at least one terminal device that is associated with the particular user received the alternate content/information resource.

In regards to new claims 87-90, see the updated rejection below.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 15-17, 40, 45-47, 69, 73-75, 87 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (U.S. Patent No. 6,571,392) in view of Shoff et al. (U.S. Patent No. 6,240,555).

Referring to claim 11, Zigmond discloses determining whether to supply alternate content to at least one terminal device associated with a user of an interactive television service that provides video content through a content signal (**see Column 7, Lines 55-67 for determining whether to supply alternate content to a user of an interactive television service that provides video content through a content signal by determining whether to transmit an announcement to the receiver notifying the receiver that an information resource/alternate content will be transmitted on a specified channel**), the alternate content to be cached on the terminal device (**see Column 5, Lines 38-42 and Column 7, Lines 63-67 for storing the information resource at the local receiver**).

Zigmond also discloses that responsive to determining to supply the alternate content to the user of the interactive television service, sending the alternate content to a cache of the terminal device (**see Column 8, Lines 1-16 for downloading the**

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**determined/announced information resource to the memory/cache of the user's terminal device).**

Zigmond also discloses determining when a specified portion of the alternate content is sent to the terminal device (**see Column 7, Lines 18-20 for the receiver unit 201 receiving the alternate content (*information resource 301*) and determining to store the alternate content in the receiver unit's storage**) and inserting a hot key signal into a content signal transmitted to the terminal device from the interactive television service provider (**see Column 8, Lines 24-30 for a fourth event that generates and transmits a "trigger" to the receiver unit, wherein Column 8, Lines 40-47 teach that the triggers are transmitted within the VBI of a content signal transmitted from an interactive television service provider (*see Figure 2*) via a network with which the terminal device and the interactive television service provider are connected (**see network 208 in Figure 2 and Column 5, Lines 10-22**) after the specified portion of the alternate content has been sent to the terminal device (**see Column 7, Lines 21-24 for transmitting the URI/resource identifier after the information resource has been stored by the receiver unit 201**).**

Zigmond also discloses that the hot key signal causes instructions to present for display an on-screen image overlaid on the video content, and wherein the on-screen image indicates availability of the alternate content (**see Figure 2, Column 7, Lines 19-31 and Column 8, Lines 40-61 for displaying an on-screen image in the form of a web page indicating the availability of alternate content by displaying the information contained within the web page**).



Zigmond further only discloses triggering the display of a locally stored information resource and does not display an option to select the locally stored information resource prior to displaying the stored information resource, thereby the trigger/hot key signal fails to teach presenting an on-screen image overlaid on the video content, wherein the on-screen image indicates availability of the alternate content prior to displaying the alternate content.

Shoff discloses providing an on-screen image overlaid on the video content, wherein the on-screen image indicates availability of alternate content prior to displaying the alternate content and selection of the on-screen image by the user results in the terminal device supplying the alternate content from the cache (**see Figures 8b-8c and Column 19, Line 41 through Column 12, Line 23**).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the trigger/hot key signal transmitted to the viewer, as taught by Zigmond, by having the trigger/hot key signal present an on-screen image prior to display of the alternate content, as taught by Shoff, for the purpose of providing a user with the option of viewing additional information retrieved from the Internet/World Wide Web (**see Column 7, Lines 36-50 of Shoff**).

Referring to claim 15, Shoff discloses that the alternate content is related in subject matter to the video content currently being viewed by the terminal device (**see Column 11, Lines 12-24**).

Referring to claim 16, Zigmond discloses that the network comprises a cable network (**see Column 5, Lines 18-22**).

Referring to claim 17, Shoff discloses that the network comprises a satellite network (**see Column 4, Lines 43-55**).

Referring to claims 40 and 45-47, see the rejection of claims 11 and 15-17, respectively.

In further regards to claim 40, Applicant has amended the claim to recite ***“determine whether to supply alternate content to a terminal device associated with a user”***. The Examiner notes that Zigmond teaches a terminal device associated with a user in Figure 2, wherein the user interacts with a set-top box 201.

Applicant has further amended the claim to recite, ***“responsive to determining to supply alternate content to the terminal device”***. See again Zigmond teaching a terminal device associated with a user in Figure 2, wherein the user interacts with a set-top box 201.

Applicant has further amended the claim to recite, ***“wherein the hot key signal causes instructions to present for display an on-screen image overlaid on a television program that is displayed based on the content signals when the hot key signal is determined to be relevant to the user”***. The Examiner notes that Zigmond teaches these limitations at Column 7, Lines 21-24 where the transmission device determines the appropriate time to transmit the hot key signal (**information**

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**identifier)** to the user, therefore determining that the hot key signal is relevant to the user. The Examiner further notes that Shoff also teaches this limitation in Figures 6-7 for determining the proper resource to display to the user based on the URL/resource identifier data stored or transmitted to the user (**see Figures 3-4 and Column 7, Line 51 through Column 8, Line 3**). Therefore determining when a hot key signal is relevant to a user based on the television program the viewer is currently watching.

Referring to claims 69 and 73-75, see the rejection of claims 11 and 15-17, respectively.

In further regards to claim 69, Applicant has amended the claim to state that ***“send the alternate content to a cache of each terminal device of the at least one terminal device”***. The Examiner notes that Zigmond teaches a television broadcast network which transmits television and information signal to multiple users (**see Column 5, lines 10-22**). Further note that Shoff explicitly teaches transmitting television and information signals to multiple users (**see Column 4, Lines 14-21**).

Applicant has further amended the claim to state, ***“wherein the hot key signal causes instructions to present for display an on-screen image overlaid on a television program that is displayed based on the content signal to a particular user of the users, wherein the on-screen image is displayed when the hot key signal is determined to be relevant to the particular user and a particular cache of a particular terminal device of the at least one terminal device that is associated*”**

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**with the particular user received at least a specified portion of the alternate content**".

The Examiner notes that Zigmond teaches these limitations at Column 7, Lines 21-24 where the transmission device determines the appropriate time to transmit the hot key signal (**information identifier**) to the user, therefore determining that the hot key signal is relevant to the user. The Examiner further notes that Shoff also teaches this limitation in Figures 6-7 for determining the proper resource to display to the user based on the URL/resource identifier data stored or transmitted to the user (**see Figures 3-4 and Column 7, Line 51 through Column 8, Line 3**). Therefore determining when a hot key signal is relevant to a user based on the television program the viewer is currently watching.

Further note Column 7, Lines 18-35 for displaying the on-screen image after the information resource has been received and stored, therefore teaching displaying the on-screen image when a particular cache of a particular terminal device of the at least one terminal device that is associated with the particular user received the alternate content/information resource.

Referring to claims 87 and 89, Zigmond discloses that the specified portion is all of the alternate content (**see Column 7, Lines 1-45 for transmitting entire HTML web content as the information resource**).

Claims 12-13, 42-43 and 70-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (U.S. Patent No. 6,571,392) in view of Shoff et al. (U.S. Patent No. 6,240,555) in further view of Kunkel et al. (U.S. Patent No. 6,477,579).

Referring to claims 12-13, Zigmond and Shoff disclose all of the limitations of claim 11, but fail to teach that determining whether to supply alternate content to the user is based on information supplied/generated by a provider of the video content.

Kunkel discloses supplying alternate content to a user based on information supplied/generated by a provider of the video content (**see headend 14 in Figures 1-2 and Column 4, Line 43 through Column 5, Line 7**).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the alternate content supplying system, as taught by Zigmond and Shoff, using the information supplied/generated by the headend 14, as taught by Kunkel, for the purpose of providing a convenient, user-friendly means by which a user can quickly access Internet-based, or other, information which is related to the programming content of a currently viewed television broadcast, and can view the information on their television without the need for an expensive computer system or the necessary skills for operating such a system (**see Column 13, Lines 39-45 of Kunkel**).

Referring to claims 42-43, see the rejection of claims 12-13, respectively.

Referring to claims 70-71, see the rejection of claims 12-13, respectively.

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Claims 18-20, 41, 48-50, 76-78, 88 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (U.S. Patent No. 6,571,392) in view of Shoff et al. (U.S. Patent No. 6,240,555).

Referring to claims 18-20, Zigmond and Shoff disclose all of the limitations of claim 11, but fail to teach the use of a FTTC, FTTH and VDSL network.

The examiner takes Official Notice to use of a FTTC, FTTH and VDSL network for distributing interactive television services.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the distribution networks, as taught by Zigmond and Shoff, using a FTTC, FTTH or VDSL network, as taught by the examiner's Official Notice, for the purpose of providing a faster and more reliable network distribution system for distribution interactive television services.

Referring to claims 48-50, see the rejection of claims 18-20, respectively.

Referring to claims 76-78, see the rejection of claims 18-20, respectively.

Referring to claims 88 and 90, Zigmond and Shoff disclose all of the limitations of claims 69 and 11, respectively, but fail to teach that the specified portion is about 15 minutes of play time when the alternate content comprises video.

The Examiner takes Official Notice to the fact that alternate content can contain about 15 minutes of play time in the form of a bumper or trailer before viewing a movie.

At the time the invention was made , it would have been obvious to a person of ordinary skill in the art, to modify the distribution networks, as taught by Zigmond and Shoff, using a trailer or bumper, as taught by the examiner's Official Notice, for the purpose of providing a faster and more reliable network distribution system for distribution interactive television services that pre-stores video data so that the user does not have to wait to start playing the video.

Referring to claim 41, Zigmond and Shoff disclose all of the limitations of claim 40, as well as combining the alternate/subsidiary data with the television program/primary content and transmitting the data together, but fail to teach using a multiplexing technique to combine the data together prior to transmission.

The examiner takes Official Notice to the use of multiplexing in order to combine multiple pieces of data together for transmission through a 6 MHz television channel.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the transmission system, as taught by Zigmond and Shoff, to include a multiplexer, as taught by the examiner's Official Notice, for the purpose of allowing more data to be transmitted over a television distribution network.

Claims 14, 44 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (U.S. Patent No. 6,571,392) in view of Shoff et al. (U.S. Patent No. 6,240,555) in further view of Pack et al. (U.S. Patent No. 7,337,457).

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Referring to claim 14, Zigmond and Shoff disclose all of the limitations in claim 11, but fail to teach that the hot key signal comprises an IP data packet, the IP data packet having a header portion and a body portion, the body portion having a data field indicating a URL where the alternate content is located.

Pack discloses a similar system to Zigmond and Shoff, where a viewer can watch a television program and respond to alternate content displayed to the user during the viewing of the television program (**see Abstract**). Pack also discloses that the hot key signal comprises an IP data packet, the IP data packet having a header portion and a body portion, the body portion having a data field indicating a URL where the alternate content is located (**see Column 5, Line 43 through Column 8, Line 59**).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hot key signal, as taught by Watts, to include TCP/IP encapsulated URL data, as taught by Pack, for the purpose of allowing a viewer to obtain shopping information for a desirable product which was displayed in program presentation without causing an interruption in the viewing of a television program (**see Column 2, Lines 32-37 of Pack**).

Referring to claims 44 and 72, see the rejection of claim 14.

### ***Conclusion***



**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason P Salce/  
Primary Examiner, Art Unit 2421

Jason P Salce  
Primary Examiner  
Art Unit 2421

July 16, 2010